8900231

<u>TO ALL TO WHOM THESE: PRESENTS; SHALL COME;</u> Purdue University Agricultural Experiment Station

Centereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED to be entitled to a certificate of plant variety protection under the LAW.

NOW, therefore, this certificate of plant variety protection is to grant UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLI-CANT(S) FOR THE TERM OF eighteen* Years from the date of this grant, subject TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EX-CLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT TY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'INW8841'

REPLACEMENT CERTIFICATE *Original grant September 30, 1993. In Testimony Winercot, I have hereunto set my hand and caused the seal of the Blant Variety Protection Office to be affixed at the City of Washington, D.C.

July the year of our Lord one thousand nine indred and ninety-four.

Plant Variety Protection Office

APPROVAL EXPIRES 2-28-88

U.S. DEPARTMENT OF AGRI	FORM APPROVED: OMB NO. 0581-0055					
AGRICULTURAL MARKETING	Application is required in order to determine if a plant variety protection certificate is to					
APPLICATION FOR PLANT VARIETY PR	be issued (7 U.S.C. 2421). Information is					
(Instructions on rever		OIA OFILLI IOW! F	held confidential until certificate is issued (7 U.S.C. 2426).			
1. NAME OF APPLICANT(S)	2.	TEMPORARY DESIGNATION	3. VARIETY NAME			
Director, Purdue University	-		·			
Agricultural Experiment Station		76788G2-5-4-94	INW8841			
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip	Code) 5.	PHONE (Include area code)	FOR OFFICIAL USE ONLY			
AGAD Building			PVPO NUMBER			
West Lafayette, IN 47907		(317) 494–8362	8900231			
6. GENUS AND SPECIES NAME 7. FAMIL	LY NAME	(Botanical)	DATE			
Triticum aestivum Gr	raminea	ne	2 June 1, 1989			
			1989 - 19			
			9:30 JA.M. P.M.			
8. KIND NAME	9. DA	TE OF DETERMINATION	9 \$ 1800 ° \$ 350.			
Wheat		1 June, 1988				
111000		., 0 4110, 1,000	DATE JUNE 2019 AMOUNT FOR CERTIFICATE			
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE	FORM OF	ORGANIZATION (Corporation.	AMOUNT FOR CERTIFICATE			
partnership, association, etc.)			\$ 250.00 # DATE			
Agricultural Experiment Station			IL DATE			
		<u> </u>	Dept. 7,1993			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION	•		12. DATE OF INCORPORATION			
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE	/E/C\ E A	NY TO SERVE IN THIS APPLIC	CATION AND RECEIVE ALL PAPERS			
Dr. V. L. Lechtenberg	-C(3), II A	ier, robenve in militari ele	A TOTAL AND THE STATE OF THE ST			
Purdue University, AES						
Agricultural Administration Buildi	าฮ					
West Lafayette, IN 47907	0	PHONE (Include are	a code): (317) 494-8363			
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT S	UBMITTE	D				
a. D Exhibit A, Origin and Breeding History of the Variety	ty (See Sec	tion 52 of the Plant Variety Pro	tection Act.)			
b. Exhibit B, Novelty Statement.						
c. 🐔 Exhibit C, Objective Description of Variety (Reques	t form fro	m Plant Variety Protection Offic	ee.)			
d. K Exhibit D, Additional Description of Variety.						
e. Exhibit E, Statement of the Basis of Applicant's Ow						
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS SEED? (See Section 83(a) of the Plant Variety Protection Ac		Y BE SOLD BY VARIETY NAME Yes (If "Yes," answer i	·			
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIET LIMITED AS TO NUMBER OF GENERATIONS?	Y BE	17. IF "YES" TO ITEM 16, W	HICH CLASSES OF PRODUCTION ANA			
☐ Yes ☑ No		Foundation	Registered Certified			
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PRO	TECTION	<u> </u>	<u> </u>			
			Yes (If "Yes," give date)			
			T No.			
	·		X No			
19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR	SALE, OR	MARKETED IN THE U.S. OR	OTHER COUNTRIES? Yes (If "Yes," give names			
			of countries and dates)			
			X No			
20. The applicant(s) declare(s) that a viable sample of basi	c seeds of	this variety will be furnished	with the application and will be re-			
plenished upon request in accordance with such regula	itions as n	nay be applicable.	••			
The undersigned applicant(s) is (are) the owner(s) of the	his sexual	ly reproduced novel plant var	iety, and believe(s) that the variety is			
distinct, uniform, and stable as required in Section 41, Variety Protection Act.	, and is en	titled to protection under the	provisions of Section 42 of the Flant			
Applicant(s) is (are) informed that false representation	herein ca	an jeopardize protection and i	result in penalties.			
SIGNATURE OF APPLICANT			DATE			
My Gent Monto			5-17-89			
SIGNATURE OF APPLICANT	DATE					
			,			

13A. Exhibit A. Origin and Breeding History of INW8841

INW8841 (formerly 7688G2-5-4-94) (PI 531247). The parentage is: Beau/13/(Knox62/6/Vigo/4/Trumbull//Hope/Hussar/3/Fairfield*3/5/Kenya Farmer)*2 /7/Siete Cerros/12/Arthur/11/Afghanistan/9/Knox*4/8/Kawvale/3/CI 11512/CI 4830 //W38/4/Wabash /5/Fairfield/6/Trumbull*3//Hope/Hussar/7/Knox/5/Fairfield/4/PI 94587//CI 11512/CI 4830/3/CI 11512/CI 4830/10/Knox*2//Frontana/Exchange/3/Monon.

The abbreviated parentage is: Beau//65256A1-9/6575A2-7-1-1-5. 65256A1-9 = (Knox 62/6/Vigo/4/ Trumbull//Hope/Hussar/3/Fairfield*3/5/Kenya Farmer)*2/7/Siete Cerros. 65256A1-9 is related to and has characteristics similar to Fillmore. 6575A2-7-1-1-5 = Arthur/11/Afghanistan/9/Knox*4/8/ Kawvale/3/CI 11512/CI 4830//W38/4/Wabash/5/Fairfield/6/Trumbull*3//Hope/Hussar /7/Knox /5/Fairfield/4/PI 94587//CI 11512/CI 4830/3/CI 11512/CI 4830/10/Knox*2//Frontana/Exchange/3/ Monon. 6575A2-7-1-1-5 is three inches shorter than Auburn and has excellent resistance to leaf rust.

Subsequent to the final cross, INW8841 was developed by a modified pedigree method of breeding with plant selections made in the F2, F4 and F7 generations. The line is the progeny from one of the 100 head rows from plant selections made in the F7 generation. Breeder Seed, produced in 1988, and offered for testing and seed increase was the F13 generation.

INW8841 has a high yield potential, excellent test weight, is about one day earlier heading than Auburn, has excellent lodging resistance, and its level of winterhardiness is higher than that of Caldwell, but lower than that of Auburn (Tables 1 and 2). The new line has a high level of tolerance to take-all, is resistant to powdery mildew, leaf rust, stem rust, Septoria leaf blotch, biotypes GP, A, B, and D of Hessian fly and it is moderately resistant to soil-borne mosaic (Tables 3 and f). Soft wheat milling and baking scores of INW8841 are very good (Table 5).

INW8841 has an upright seedling growth habit, is awnletted and its glumes are white at maturity. It is similar to Arthur in general plant type, but the spike is longer. Coleoptile color is white. INW8841 has been uniform and true breeding during development of Breeder Seed. Variants have not been observed.

13B. Exhibit B. Novelty Statement

INW8841 is most similar to Auburn (or, of the choices on Form LPGS 470-6, Arthur) in general plant type. INW8841 differs from Auburn as follows:

The rachis internodes of INW8841 are longer (4.9 mm for INW8841 compared to 3.9 mm for Auburn); the date of heading of INW8841 is 1 to 2 days earlier than Auburn; INW8841 is tolerant to the takeall disease; and INW8841 has gene H5 that conditions resistance to biotype D of the Hessian fly whereas Auburn has gene H6, but not H5 and is, therefore, resistant to biotype B, but not D.

2 4 1

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, POULTRY, GRAIN & SEED DIVISION BELTSVILLE, MARYLAND 20705

EXHIBIT (Wheat)

OBJECTIVE DESCRIPTION OF VARIETY

INSTRUCTIONS: See Reverse. WHEAT (TRIT	ICUM SPP.)
NAME OF APPLICANTIS	FOR OFFICIAL USE ONLY
Dr. B. R. Baumgardt, Director ADDRESS (Street and No. of R.F.D. No., City, State, and ZIP Code)	8900231
Agricultural Experiment Station	VARIETY NAME OR TEMPORARY DESIGNATION
Purdue University	76788G2-5-4-94 (INW8841)
West Lafayette, IN 47907	76760G2=J=4=94 (INW684I)
Place the appropriate number that describes the varietal character Place a zero in first box (e-s- 0 8 9 or 0 9) when number is	of this variety in the boxes below. either 99 or less or 9 or less.
1. KIND:	
1 1=common 2=ourum 3=EMMER 4=SPELT 5=	POLISH 6 = POULARO 7 = CLUB
2. TYPE:	= 1 = SOFT 3 = OTHER (Specify)
2 1 = SPRING 2 = WINTER 3 = OTHER (Specify)	2 = HARO
2 1 = WHITE 2 = RED 3 = OTHER (Specify)	
3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:	
2 2 9 FIRST FLOWERING	2 3 6 LAST FLOWERING
4. MATURITY (50% Flowering):	
NO. OF DAYS EARLIER THAN	1 = ARTHUR 2 = SCOUT 3 = CHRIS
0 1 NO. OF DAYS LATER THAN	4 = LEMHI 5 = NUGAINES 6 = LEEDS
5. PLANT HEIGHT (From sail level to top of head):	
0 9 3 04. 404	
0 0 CM. TALLER THAN	3 = CHRIS
0 0 CM. SHORTER THAN	1 = ARTHUR 2 = SCOUT 5 = LEEDS
6. PLANT COLOR AT BOOTING (See reverse):	7. ANTHER COLOR:
2 1 = YELLOW GREEN 2 = SREEN 3 = BLUE GREEN	1 1 = YELLOW 2 = PURPLE
8. STEM:	
1 Anthocyanin: I = ABSENT 2 = PRESENT	2 Waxy bloom: I = ABSENT 2 = PRESENT
Hairiness of last 2 internode of rachis: 1 = ABSENT 2 = PRESENT	Internodes: 1 = HOLLOW 2 = SOLID
0 4 NO. OF NODES (Originating from node above ground)	CM. INTERNODE LENGTH BETWEEN FLAG LEAF 2 2 AND LEAF BELOW
9. AURICLES:	
	2 - pagesur
1 Anthocyanin: 1 = ABSENT 2 = PRESENT	2 Hairiness: 1 = ABSENT 2 = PRESENT
10. LEAF:	
Flag leaf at = ERECT 2 = RECURVED booting stage: 2 = OTHER (Secretary)	2 Flag leaf: 1 = NOT TWISTED 2 = TWISTED (1/2 twi
3 = OTAEX (Specify).	· ——
1 Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT	2 Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRI
1 2 MM. LEAF WIDTH (First leaf below flag leaf)	CM. LEAF LENGTH (First leaf below flag leaf):

FORM LPGS-470-6 (3-79) (Formerly Form GR-470 (2-73), which may be used

<u> </u>			890625
E. HEAD: /		Shape: 1 = TAPERING	2 = STRAP 3 = CLAVATE
1 Dessity: 1 = LAX 2	= DENSE	1 4 = OTHER (Sp	
			· .
3 Awnedness: 1 = AWNLE	SS 2 = APICALLY AWNLETED 3 =	AWNLETED 4 = AWNED	
1= w	HITE 2 = YELLOW 3 = PINK 4 = F	RED	
2 Color at maturity: 5 = 8	ROWN 6 = BLACK 7 = OTHER	(Specily):	
1 0 CM. LENGTH		T 3 MM. WIDTH	
2 0 0.00 22.00 11		TT 13 1	
12. GLUMES AT MATURITY:	_		
Length: I = SHORT (CA	4.7 mm.) 2 = MEDIUM (CA. 8 mm.)	$\frac{1}{2} \text{Width: } 1 = \text{NARROW} (0)$ $3 = \text{WIDE} (CA.$	
	,	0 - 1102 (011)	
Shoulder I = WANTING	2 = OBLIQUE 3 = ROUNDED		
shape: 4 = SQUARE	_	1 Beak: 1 = OBTUSE	2 = ACUTE 3 = ACUMINATE
13. COLEOPTILE COLOR:		14. SEEDLING ANTHOCYAN	liN:
	3		•
I I = WHITE 2 = RED	3 = PURPLE	1 I = ABSENT 2=	PRESENT
15. JUVENILE PLANT GROW	TH HABIT:		
3 I = PROSTRATE	2 = SEMI-ERECT 3 = ERECT	•	
<u></u>			
16. SEED:			•
1 Shape: 1 = OVATE	2 = OVAL 3 = ELLIPTICAL	1 Cheek: 1 = ROUNDED	2 = ANGULAR
2 Brush. 1 = SHORT	2 = MEDIUM 3 = LONG	1 Brush: I = NOT COL	LARED 2 = COLLARED
Phenol reaction	= IVORY 2 = FAWN 3 = LT. BROWN		
(See instructions):	= BROWN 5 = BLACK		
Golor: L = WHITE 2		5	
Color: = WHITE 2	PRES RED 4 PURPLE	3 = OTHER (Specify)	
0 6 MM. LENGTH	O 3 MM. WISTH	3 3 GM. PER 1000 S	FEDS
<u></u>		3/3	
17. SEED CREASE:		D - 1 1 2 - 2 - 2 - 2	
1	SS OF KERNEL 'WINOKA'	121	LESS OF KERNEL 'SCOUT' LESS OF KERNEL 'CHRIS'
- '	S OF KERNEL 'CHRIS' WIDE AS KERNEL 'LEMHI'	_	LESS OF KERNEL 'LEMHI'
	d, 1 = Susceptible, 2 = Resistant)		
		STRIPE RUST	
2 (Races)Prelavent	2 LEAF RUST (Races)Prevalent	O (Races)	LOOSE SMUT
	O BUNT		•
2 POWDERY MILDEW Prevalent	U BUNT	OTHER (Specify)	
19. INSECT: (0 = Not Tested	, 1 = Susceptible, 2 = Resistant)		
0 SAWFLY	I APHID (Bydv.)	O GREEN BUG	1 CEREAL LEAF BEETLE
OTHER (Specify)		2 GP 2 A	2 8 0 6
·	RACES:		
	}	2 D O E	0 F 0 G
20. INDICATE WHICH VANIE	TY MOST CLOSELY RESEMBLES THAT S	UBMITTED.	
CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Arthur	Seed size	
Leaf size	Arthur	Seed shape	Arthur
Leaf color	Arthur	Caleaptile elongation	Arthur
Leaf carriage	Arthur	Seedling pigmentation	Arthur
	INSTRU	CTIONS	

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (a) L.W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.
- (b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

Table 1. Performance of INW8841, INW8852, Clark, Caldwell and Auburn in Advanced Nursery trials at Lafayette, Indiana.

Variety	Yield	Test weight	Date headed	Plant height	Straw score	Winter survival
	bu/a	lb/bu	May	in	0-91	8
		Av.	1985, 198	7, 1988		
INW8841	73.6	60.5	14.7	34.6	3.3	100
INW8852	63.8	59.5	15.7	35.2	3.3	98
Clark	69.7	60.1	11.0	34.6	3.7	98
Caldwell	68.4	59.4	12.7	33.4	3.3	98
Auburn	63.9	59.4	15.7	34.3	4.0	100
LSD (.05)	8.6	1.9	1.1	1.6	1.2	
			1986 ²		•	
INW8841	64.6					40
NW8852	46.0					33
Caldwell	30.4	51.7	13.0	31.0		17
Auburn	65.7	52.4	16.0	35.0		53
LSD (.05)	10.5					13
		-	1983-198	5		
INW8852	88.9	60.5	22.3	37.1	4.0	100
Caldwell	90.5	60.6	20.3	37.3	3.3	100
Muburn	84.5	59.8	22.7	37.3	3.3	100
LSD (.05)	5.5	1.6	1.5	2.6	1.3	

 $[\]frac{1}{2}$ 0 = no lodging or leaning to 9 = lodged flat.

Data for 1986 are presented separately because of severe winterkilling.

Table 2. Performance of wheat varieties near Sullivan, Indiana, 1988.

Variety	Yield	Test weight	Date headed
	bu/A	lb/bu	May
INW8841	46.1	56.9	11
INW8852	45.9	55.9	12
Clark	52.6	57.9	6
Caldwell	47.8	56.4	8
Compton	48.9	59.2	11
Auburn	45.6	56.6	12
LSD (.05)	4.9	0.9	0.5

¹ Values are averages of nine observations: three seeding rates x three replications.

Table 3. Disease severities and reactions of selected wheat varieties to diseases and Hessian fly, Lafayette, Indiana 1986-1988.

		Disease ¹							sian'	
	Take-							Hessian fly		
Variety	all ²	PM	LR	SR	Septoria	SBM	BYD	В	D	
			- ¥3		0-	94		0-6	5 ⁵	
			٠	1988				·		
INW8841						7.0	5.5	0.	· , 0	
INW8852 Clark						3.0 3.0	5.5 5.5	0 0	- 0 0	
Caldwell Auburn						5.5 3.0	5.0 5.5	0 0	6 6	
		•		1987			•			
INW8841	301(13)		20	0	7.5 D	4.0		0	0	
INW8852 Clark	323(6) 267(51)	٠	7 20	0 0	7.5 E 8.0 E	3.5 3.5	6	1 0	0 0	
Caldwell Auburn	198(145) 186(156)		20 tr	0 0	8.0 E 7.5 D	5.0 4.0	G ⁶ G	0	· 6	
				1986						
INW8841		2	0.3	0	8			2 3	3	
INW8852 Clark		2 3	0.5 2.0	0 3	7 8	2.5 1.0		· 3	1 1	
Caldwell Auburn		3 2	tr tr	0 tr	9 7	7.5 5.5		0 1	1 6 6	

¹ PM, powdery mildew; LR, leaf rust; SR, stem rust; Septoria, S tritici and S nodorum; SBM, soil-borne mosaic; BYD, barley yellow dwarf; WSSM, wheat spindle streak mosaic; B and D, biotypes B and D of Hessian fly.

2 1987: yield, g/plot (3-rep ave, LSD = 89) in take-all test; value in parentheses is yield rank, 180 entries in test.

³ Percentage of leaf blade (leaf sheath and stem for SR) area infected.

^{4 = 0} = no infection to 9 = severe infection or expression of symptoms; for Septoria, A = no pycnidia in lesions to E = abundant pycnidia in lesions. 0 = all seedlings normal to 6 = all seedlings stunted.

⁶ G = plants in hill plots were well-grown and had infection but showed minimal BYDV symptoms.

Table 4. Disease reactions 1 of wheat varieties in drill strip plots, Purdue Agronomy Farm, 1987 and 1986.

Variety		1987				1986			
	PM 6/1	Sep 6/8	LR 6/8	PM 6/10	Sep 6/13	LR 6/19	SR 6/25		
INW8841	13.8	57.7	0						
INW8852	12.5	57.7	0	8.2	57.3	20.0	23.0		
Clark	7.0	55.6	0.3	20.3	53.1	40.0	53.8		
Auburn	1.5	61.7	0.1	2.3	51.1	0.0	61.3		
Caldwell	21.3	70.1	0.2	32,3	72.4	7.3	6.0		
Arthur	17.0	63.8	0.3	6.0	64.0	18.0	71.0		
Monon	15.0	70.1	4.0	27.0	89.0	40.0	68.0		

Data are from the normal sowing date plots. Disease is reported as the percent severity on the date indicated. Values are averages of readings in four replicate plots. PM = powdery mildew, Sep = Septoria tritici and/or Septoria nodorum leaf blotch, LR = leaf rust (severity on flag leaf only), SR = stem rust (severity on upper stem and leaf sheaths.

Table 5. Quality evaluations of Advanced Nursery samples from Lafayette, Indiana.

Variety	Mill score ^a		Bake score ^a
		1986	
Tyler (S) ^b Benchmark ^c INW8841 INW8852	100.0A 103.5A 88.7D 89.3D		100.0A 107.7A 98.0B 84.1E
	•	1985	
Auburn (S) Benchmark INW8841	100.0A 110.0A 109.6A		100.0A 108.7A 104.7A
		1984	
Caldwell (S) Benchmark INW8852	100.0A 105.6A 97.3B		100.0A 98.5B 86.3D
		1983	
Auburn (S) Benchmark INW8852	100.0A 100.0A 97.3B		100.0A 100.6A 102.7A

^a All samples were evaluated at the Soft Wheat Quality Laboratory, Wooster, OH. Milling score is in percent in relation to the standard cultivar and is calculated as a weighted average of flour yield (50%), softness score (30%), test weight (10%) and ash (10%). Letter ratings A to F are added at 5% intervals of the milling score, e.g. A for 100 and above, B for 95.0 to 99.9, C for 90.0 to 94.9 etc. Quality categories A through E are acceptable.

Baking quality score is a weighted average of three tests: protein (20%), alkaline water retention capacity (AWRC), a measure of gluten level, (40%), and softness equivalent (40%). Scored A to E as for milling.

⁽S) = standard cultivar from the same test chosen as the standard for comparison.

Benchmark is a wheat of known good quality grown in one environment to compare with standard cultivars in all tests that year.

Exhibit E. Statement of Basis of Applicant's Ownership

'INW8841' was developed under leadership of Dr. H. W. Ohm. Dr. Ohm is an employee of Purdue University which claims ownership to intellectual property developed by its faculty.